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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/519,661	12/27/2004	Donald L. Rymer	AD6871USPCT	7413

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EXAMINER	
BERNSHTEYN, MICHAEL	
ART UNIT	**PAPER NUMBER**
1713	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/519,661	RYMER ET AL.	
	Examiner	Art Unit	
	Michael Bernshteyn	1713	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-18 is/are pending in the application.

4a) Of the above claim(s) 1-5 and 13-18 is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 6-12 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) 1-18 are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This Office Action follows a response filed on May 9, 2007. No claims have been amended, cancelled, or added.

2. Claims 6-12 are active.

Claim Rejections - 35 USC § 103

3. The text of this section of Title 35 U.S.C. not included in this action can be found in a prior Office Action.

4. Claims 6-8 and 10-11 are rejected under 35 U.S.C. § 103(a) as being unpatentable as obvious over Klock et al. (EP 0 402 213 A1) in view of Rombach et al. (U. S. Patent 3,153,009), for the rationale recited in paragraph 7 of Office Action dated on November 28, 2006.

5. Claim 9 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Klock et al. in view of Rombach et al. as applied to claims 6-8 and 10-11 above and further in view of Aurenty et al. (U. S. Patent 6,472,054), for the rationale recited in paragraph 8 of Office Action dated on November 28, 2006.

6. Claim 12 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Klock et al. in view of Rombach et al. as applied to claims 6-8 and 10-11 above and further in view of Kroggel et al. (U. S. Patent 5,559,175), for the rationale recited in paragraph 9 of Office Action dated on November 28, 2006.

Response to Arguments

7. Applicants traverse the rejection under 35 U.S.C. § 103(a) of claims 6-8 and 10-11 as being unpatentable as obvious over Klock et al. (EP 0 402 213 A1) in view of Rombach et al. (U. S. Patent 3,153,009), the rejection under 35 U.S.C. § 103(a) of claim 9 as being unpatentable over Klock et al. in view of Rombach et al. as applied to claims 6-8 and 10-11 above and further in view of Aurenty et al. (U. S. Patent 6,472,054), and the rejection under 35 U.S.C. § 103(a) of claim 12 as being unpatentable over Klock et al. in view of Rombach et al. as applied to claims 6-8 and 10-11 above and further in view of Kroggel et al. (U. S. Patent 5,559,175). Applicant's arguments have been fully considered but they are not persuasive.

8. Regarding to the Applicants arguments that the surfactants described by Klock are present In an amount of greater than 0.3 wt% or greater than 0.4 wt% based upon the dry weight of PVA (page 2, lines 46-54), and Rombach permits only 0.04 to 0.2 wt% of surfactant, based on the weight of the polyvinyl alcohol (col. 2, lines 16-21); therefore Klock and Rombach teach away from each other (page 6, 3rd paragraph, page 7, 1st paragraph), it is noted that the first reference by Klock, which is the closest prior art, clearly discloses the amount of surfactants within the claimed range.

Furthermore, it is noted that the amount of the surfactant(s) is a result effective variable, and therefore, it is within the skill of those skilled in the art to find the optimum value of a result effective variable, as per ***In re Boesch and Slaney*** 205 USPQ 215 (CCPA 1980). See also *Peterson*, 315 F.3d at 1330, 65 USPQ2d at 1382: "The normal desire of scientists or artisans to improve upon what is already generally known provides the motivation to determine where in a disclosed set of percentage ranges is the optimum combination of percentages."

9. In response to the arguments that the art of preparing printing plates of Aurenty is completely inapposite to the field of the present invention, specifically, processes for preparing polyvinyl butyral compositions (pages 7-8, the bridging paragraph), it is noted that Aurenty clearly discloses the usage of alkyl tail surfactants, and Illustrative examples of alkyl tail surfactants include sodium dodecylsulfate, isopropylamine salts of an alkylarylsulfonate, sodium dioctyl succinate, **sodium methyl cocoyl taurate**, dodecylbenzene sulfonate, etc. (US'054, col. 6, lines 57-64).

It is important that Aurenty discloses the claimed sodium methyl cocoyl taurate as preferable **surfactant**, not like a possible additive, optional filler, etc.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate sodium methyl cocoyl taurate as taught by Aurenty in Klock and Rombach's process for preparing PVB composition because all of the above surfactants are functionally equivalents and can substitute each other.

10. In response to applicant's argument that Aurenty reference is not an analogous art, the fact that applicant has recognized another advantage which would flow naturally

from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter, 1985).

11. In response to the arguments that Kroggel is cited to support the proposition that all strong mineral acids are interchangeable in Applicants' claimed processes, and this proposition may hold true in the art of synthesizing polyvinyl butyral dispersions, to which Kroggel pertains, but it is inapposite, however, to Applicants' claimed processes (page 8, 3rd paragraph), it is noted that Kroggel clearly discloses a process for the preparation of polyvinyl acetal. Thus, it is the close prior art.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ phosphoric acid as taught by Kroggel in combined Klock and Rombach's process for producing polyvinyl butyral resin instead of hydrochloric acid because they are functional equivalents and can be substituted by each other with reasonable expectation of success

12. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

13. Regarding the Applicants arguments that the M/R ratios of the examples 1-4 are out of the claimed range (page 9, table 1), and data are not consistent with the view expressed in the Official Action (page 4), it is worth to mention that two main examples

(EP'213, pages 5-6, Example Temoin 1 and Example Temoin 2) clearly have M/R ratios about 4, which is within the claimed range.

14. As to the restriction requirements and a request to rejoin of claims 1-5 and 13-18, it is noted, that the claimed invention does not have novelty, as it was shown above, and the requirements is still deemed proper and is therefore made FINAL.

15. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Bernshteyn whose telephone number is 571-272-2411. The examiner can normally be reached on M-F 8-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on 571-272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Michael Bernshteyn
Patent Examiner
Art Unit 1713

MB
07/17/2007

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